

CLAIMS

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1. A method of allocating one of a plurality of serving call state control functions to a subscriber, the method 5 including:

receiving load information from at least one serving call state control function in a signalling message; and

determining a serving call state control function for the subscriber in dependence on the received load 10 information.

2. The method of claim 1 further including receiving load information from a plurality of serving call state control functions.

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3. The method of claim 1 or claim 2 wherein the step of determining a serving call state control functions is carried out by a network resource.

20 4. The method of claim 3 wherein the network resource is the interrogating call state control function.

5. The method of claim 4 wherein the network resource is a home subscriber server.

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6. The method of any one of claims 1 to 5 wherein the subscriber is either located in a visited network or a home network and is registered in a home network.

30 7. The method of any one of claims 1 to 6 wherein the load information indicates the actual current load of the serving call state control function.

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8. The method of any one of claims 1 to 6 wherein the load information indicates the availability of the call state control function.

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9. The method of any one of claims 1 to 6 wherein the load information indicates a time period in which the serving call state control function cannot receive further subscriber registrations.

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10. The method of claim 1 further including a session between a serving call state control function and interrogating call state control function for transmitting the availability information.

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11. The method of claim 10 further including sessions between interrogating call state control function and a plurality of serving call state control functions.

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12. The method of claim 10 further including transmitting an unavailability signal within the session from the serving call state control function to interrogating call state control function to indicate unavailability of the serving call state control to receive subscriber registrations.

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13. The method of claim 10 further including transmitting an availability signal within the session from the serving call state control function to the interrogating call state control function to indicate availability of the serving call state control function to receive subscriber registrations.

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14. The method of claim 10 further including transmitting a keep-alive signal within the session from the serving call state control function to the interrogating call state control function to indicate availability of the serving
5 call state control function to receive subscriber registrations.
15. The method according to claims 1 to 9 wherein the signalling message is related to subscriber registration.
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16. The method according to claims 10 to 14 wherein the signalling message is related to a session between a serving call state control function and interrogating call state control function.
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17. The method according to claims 15 and 16 wherein the signalling message is one of a 200 OK, INVITE, SUSPEND, or RESUME SIP Requests.
20 18. The method according to claim 15 wherein the signalling message is one of a Cx_Put, Cx_Put Resp, Cx_Pull, or a Cx_Pull Resp messages.
19. The method of any one of claims 1 to 18 in which the serving call state control function is selected on a session basis.
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20. A method according to any preceding claim in which the subscriber is located in a home network or a visited network, and the serving call state control function is located in the home network.
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APPENDIX

21. A network element for allocating one of a plurality of serving call state control function means to a subscriber,
5 the network including a home network comprising an interrogating call state control function means and a plurality of serving call state control function means; wherein the interrogating call state control function means receives load information from at least one of the serving
10 call state control function means in a signalling message; and a broker associated with the network element determines a serving call state control function means for the subscriber in dependence on the received laod information.
- 15 22. A network element according to claim 19, wherein the network element is the interrogating call state control function.
23. A network element according to claim 20, wherein the
20 network element is a home subscriber server.
24. A network element according to any one of claims 19 to 21, wherein the network further includes a visited network, wherein the subscriber is connected in either the visited
25 network or the home network.
25. A network element according to any one of claims 19 to 22 wherein the interrogating call state control function means receives load information from a plurality of serving
30 call state control functions.

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26. A network element according to any one of claims 21 to wherein the load information indicates the availability of a call state control function.
- 5 27. A network element according to claims 21 to 26 wherein the signalling message is related to subscriber registration.
- 10 28. A network element according to any one of claims 21 to 27 further including a session between a serving call state control function for transmitting for transmitting the availability information.
- 15 29. A network element according to claims 28 wherein the signalling message is related to a session between a serving call state control function and interrogating call state control function.
- 20 30. A network element according to claim 28 or 29 wherein the signalling message is one of a 200 OK, INVITE, SUSPEND, or RESUME SIP Requests.
- 25 31. The method according to claim 27 wherein the signalling message is one of a Cx_Put, Cx_Put Resp, Cx_Pull, or a Cx_Pull Resp messages.
- 30 32. A mobile wireless communications system including a home network, wherein the home network includes a network element for allocating one of a plurality of serving call state control function means provided in the home network to a subscriber, the home network further comprising an interrogating call state control function means; wherein the

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interrogating call state control function means receives load information from at least one of the serving call state control function means; and a broker associated with the network element determines a serving call state control 5 function means for the subscriber in dependence on the received load information.

33. A mobile wireless communication system according to claim 32 further including a visited network, wherein the 10 subscriber is connected in either the visited network or the home network.